WO 2005/052255 PCT/EP2004/013433

## **Claims**

1. A paper coating composition comprising one or more thickeners, characterised in that at least one of said one or more thickeners is a cold water swellable starch ester.

- 2. A paper coating composition according to claim 1, characterised in that starch ester is a starch carbamate phosphate ester.
- 3. A paper coating composition according to claim 1 or claim 2, characterised in that the starch ester is derived from potato or tapioca starch.
- 4. A paper coating composition according to any one of the proceeding claims, characterised in that it comprises 0.005-2% by dry weight, preferably 0.008-1.7% by dry weight of said starch ester.
- 5. A paper coating composition according to any one of the proceeding claims, characterised in that it further comprises one or more pigments, one or more binders and, optionally, one or more additives.
- 6. A paper coating composition according to any one of the proceeding claims, characterised in that it comprises 30-75% by weight dry substance.
- 7. Use of a cold water swellable starch ester as a thickener in the preparation of a paper coating composition.
- 8. A process for the preparation of a paper coating composition comprising adding one or more pigments, one or more thickeners, one or more binders and, optionally, one or more additives to an aqueous solution and mixing, characterised in that at least one of said one or more thickeners is a cold water swellable starch ester.
- 9. A process according to claim 8 characterised in that the one or more binders are added to the aqueous solution before the one or more thickeners.

WO 2005/052255 PCT/EP2004/013433

10. A process according to either of claim 8 or claim 9 characterised in that, for 100 parts pigment, it comprises 0.01-2 parts starch ester.

- 11. A method of manufacturing paper comprising applying to at least one surface of a sheet of paper or a paper web a composition according to any one of claims 1-6 or prepared according to the process of any one of claims 8 to 10.
- 12. A method according to claim 11, further comprising the steps of removing any excess coating composition, drying and, optionally, calendering the sheet of paper or paper web.
- 13. A paper product coated with a composition according to any one of claims 1-6 or manufactured according to the method of claim 11 or claim 12.